Engineering

LINEAR VOLTAGE REGULATOR, April Johnson and George Engel*, Southern Illinois University at Edwardsville, Department of Electrical and Computer Engineering, Edwardsville, IL 62026, apjohns@siue.edu

LINEAR VOLTAGE REGULATOR ABSTRACT

The linear voltage regulator was designed to supply stabilized 12±0.5V across a specified load with an output current of 0.5 – 1.5A. The voltage regulator received an input DC voltage of 18 to 24 V. Voltage regulator received an input DC voltage of 18 to 24V. Voltage transients of 65V were tolerated for a maximum duration of 200ms. A load regulation of ± 0.4V DC was maintained according to the range of output loading and normal input voltage range. The operating temperature range of the device was -40°- 85°C.